## ABSTRACT OF THE DISCLOSURE

The present invention provides a test bitstream generator and method for generating test bitstreams to test a bitstream decoder that is arranged to decode 5 bitstreams generated in accordance with a predefined syntax. The method comprises the steps of generating test code from the syntax, the test code being arranged when executed to generate a test bitstream dependent on values assigned to a plurality of variables, each variable having a number of interesting values. The method then involves executing the test code, including the step of, for each of said variables, assigning that variable one of its interesting values, in order to thereby generate a test bitstream dependent on the interesting value assigned to each variable. It has been found that this technique provides an automated process for extensively testing a bitstream decoder.